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Kunihiko Fukui

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RECORD OF ORAL HEARING
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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KUNIHICO FUKUI

Appeal 2010-002481
Application 09/902,711
Technology Center 2600

Oral Hearing Held: Thursday, March 10, 2011

Before ALLEN R. MacDONALD, CARLA M. KRIVAK and THOMAS S. HAHN, Administrative Patent Judges

ON BEHALF OF THE APPELLANT:

ROBERT J. WEBSTER, ESQ.
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1 *The above-entitled matter came on for hearing on Thursday,*
2 *March 10, 2011, commencing at 10:46 a.m., at the U.S. Patent and*
3 *Trademark Office, 600 Dulany Street, 9th Floor, Hearing Room A,*
4 *Alexandria, Virginia, before Lori B. Allen, notary public.*

5
6 JUDGE MacDONALD: We're ready to begin.

7 MR. WEBSTER: Thank you very much.

8 There are two independent claims that are on appeal. Claim 1 is
9 written in means plus function format, and claim 10 is not in means plus
10 function, just structure format, but they're just basically an apparatus claims.

11 Claim 1 recites, among other features, operation time, integrator
12 means for integrating operation times of an engine of a vehicle. Claim 10
13 recites, among other features, an operational timer determining the time of
14 operation of an engine of a vehicle and for generating a time of operation
15 signal, and these signals are used to determine when you're supposed to
16 change your oil.

17 Now, the McDonald reference differs. The only integrations
18 that are disclosed in McDonald that we can find are either integrations of
19 engine revolution or integrations of effective engine revolutions. We really
20 are unable to find any disclosure in McDonald of an operation integrator
21 means for integrating operation times of an engine mounted on a vehicle as
22 recited in claim 1 or of an operational timer determining the time of
23 operation of an engine of a vehicle and for generating a time of operation
24 signal as recited in claim 10.

25 JUDGE MacDONALD: I have a question, Mr. Webster. Isn't
26 this integration, though, this feature you're discussing -- doesn't the
27 specification indicate that that's the prior art?

28 MR. WEBSTER: It indicates that there are two prior patents
29 and one of them has a time integration feature.

30 JUDGE MacDONALD: In other words, given this admission, I
31 don't see the point of the argument that McDonald, the prior art, fails to

1 teach this portion of the claim when there was an admission that it's in the
2 prior art, or is what's in the prior art different than what's in the claim?

3 MR. WEBSTER: Well, it appears that what the -- in the
4 background or in the -- at the end of the background of the invention, what
5 the applicant is saying is that the degree of degradation of oil differs between
6 where the vehicle travels in a long distance for a short time and where the
7 engine is left aside under an idling state for a long time, and therefore -- and
8 in the prior art, one of the pieces of prior art, the degradation required an
9 extremely complicated sensor.

10 He is saying that he's using both of these features, both the --
11 the mileage feature and the time feature, and he is combining those, and he
12 has a controller that looks at both of those signals.

13 JUDGE MacDONALD: Combining or selecting?

14 MR. WEBSTER: He is -- he has a controller that, when
15 he --determines both of those signals, and he gets input from both of those
16 signals, and when the first of those signals comes up and triggers an oil --

17 JUDGE MacDONALD: Okay. So, isn't it just a case of you're
18 combining them and use one or the other; you're actually using both.

19 MR. WEBSTER: Yeah, you use both signals. Okay.

20 Now, with respect to the McDonald -- the secondary reference
21 just has the odometer feature. McDonald himself has a mileage feature. So,
22 McDonald is teaching measuring engine revolutions or wheel revolutions,
23 basically, the wheel revolutions being picked up by the odometer.

24 So, what I'd like to do is focus on the distinguishing
25 characteristics with respect to McDonald, which is basically the rejection.

26 So, the only time interval that's disclosed by McDonald is a
27 predetermined interval -- for example, 1 second -- and it says that in the
28 spec -- of engine operation -- during which McDonald determines an oil
29 temperature.

30 What's critical to his operation is he determines an oil
31 temperature, and he can determine that -- he determines that every time the
32 engine is turned on, and he has a certain time interval in which he detects

1 that, and it says in the spec typically 1 second, or he detects that over a
2 certain number of engine revolutions -- for example, 500 engine
3 revolutions -- but has no disclosure of integrating the predetermined oil
4 temperature sampling intervals for any reason whatsoever.

5 So, the examiner says that -- the answer says, "Although the
6 counted revolutions do not equate with time of operations, the use of time
7 would be obvious because McDonald states that revolutions can be
8 measured over a period of time."

9 Now, we respectfully disagree with that, because actually,
10 McDonald samples oil temperature over a predetermined time interval or
11 over a predetermined number of engine revolutions, and then he assigns
12 engine oil contaminant penalty factors that are found to be associated with
13 engine oil temperature and engine oil contamination.

14 He does have no disclosed use for integrating engine oil
15 temperature intervals. He just uses the sampling individuals, intervals,
16 individually to determine the oil contamination penalty factors, and he
17 doesn't generate a time of operation signal.

18 Now, the examiner's answer has another argument. He says
19 that measuring time of engine operation would have provided an estimate of
20 engine revolutions without having to provide an extra sensor if an estimate
21 of revolutions was all that was needed, and we respectfully disagree with
22 this, because engine revolutions vary dramatically depending upon
23 operation -- other than operation time, depending on vehicle speed.

24 If you're traveling 150 miles an hour on a race track or 5 miles
25 an hour in heavy traffic, a measurement of just the predetermined time
26 interval really will not come close to giving you an accurate estimate of the
27 number of engine revolutions occurring during that time period.

28 Now, McDonald also contains no suggestion of integrating, no
29 temperature measurement signals for any purpose whatsoever, and the only
30 suggestion of doing that is, as we say in here, the claimed invention.

31 Now, with respect to the dependent claims, there are separate
32 arguments that are presented for those, and so, with respect to claims 5 and

1 14, there really aren't any separate arguments. Those rely on the arguments
2 for 1 and 10.

3 With respect to 2 and 11, 2 and 11 recite a second embodiment
4 where they have L-1, L-2, T-1, T-2, you know, different preset values, and if
5 you take a look at the Figure 2, they actually are from step S-4 down through
6 step S-9. So, it is a different embodiment, and we just don't find that
7 anywhere in McDonald at all.

8 Similarly, for 5 and 14 -- I mean, for 7 and 16, we argue those
9 separately because there's no relationship between the engine oil time and
10 degree of degradation of the oil, and having a computer device that gets both
11 of those and then selects based upon, you know, which one comes up.

12 So, basically, for those arguments, we -- we respectfully submit
13 that the current rejection is without merit and it should be reversed.

14 JUDGE MacDONALD: Any questions, Judge Hahn?

15 JUDGE HAHN: No.

16 JUDGE MacDONALD: Judge Krivak?

17 JUDGE KRIVAK: No.

18 MR. WEBSTER: Thank you very much.

19 JUDGE MacDONALD: We're off the record.

20 (Whereupon, at 10:54 a.m., the proceedings were concluded.)

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